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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/966,027

09/28/2001

Paul Nielsen

9381.00

4672

26889 7590 03/30/2009

MICHAEL CHAN  
NCR CORPORATION  
1700 SOUTH PATTERSON BLVD  
DAYTON, OH 45479-0001

EXAMINER

APPLE, KIRSTEN SACHWITZ

ART UNIT

PAPER NUMBER

3694

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PAUL NIELSEN

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Appeal 2009-0493  
Application 09/966,027  
Technology Center 3600

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Decided: <sup>1</sup> March 30, 2009

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Before, MURRIEL E. CRAWFORD, HUBERT C. LORIN and JOSEPH A.  
FISCHETTI, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

## STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 31-41. Claims 1-30 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b). (2002)

## SUMMARY OF DECISION

We AFFIRM.

## THE INVENTION

Appellant claims a system and method for operating and configuring a self service terminal (Specification 1:5-6)

Claim 31, reproduced below, is representative of the subject matter on appeal.

31. A method of operating an ATM, comprising:
- a) charging customers for services rendered by the ATM; b)
  - predicting a time when usage of the ATM by customers will increase,
  - and c) increasing charges at the ATM during said time.

### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

|         |   |               |
|---------|---|---------------|
| Estes   | US 6,508,398 B1   | Jan. 21, 2003 |
| Mishkin | <i>The Economics of<br/>Money, Banking, and<br/>Financial Markets<br/>Fifth Edition</i> | 1997          |

The following rejection is before us for review:

The Examiner rejected claims 31-41 under 35 U.S.C. § 103(a) as unpatentable over Estes and Mishkin.

### ISSUE

Has Appellant shown that the Examiner erred in rejecting claims 31-41 on appeal as being unpatentable under 35 U.S.C. § 103(a) over Estes in view of Mishkin on the grounds that a person with ordinary skill in the art would understand that pricing can be successfully increased in markets where limited alternative resources are available?

### FINDINGS OF FACT

We find the following facts by a preponderance of the evidence:

1. The Examiner found:

It is a very well know concept in Economics and Marketing that the higher the demand (in this case more usage of ATM) the higher a price one can charge. This concept has been used for centuries - charge more for phone calls at peak time or airline tickets or whatever is in demand. Applying this to ATM charges is clearly obvious. (Final, p.3.)

2. The Examiner further found that it would be obvious to modify Estes to increase charges at the ATM during times of predicted increased usage because “...one would be motivated to capture the highest possible revenue.” (Final, p. 3.)

3. Estes discloses

The ATM enhancement system comprises an enhancement processor 38 which serves as an ATM enhancement computer. The processor 38 has its own memory 40. The ATM core computer 16 issues commands which are available at an ATM computer port. Line 42 is connected to this port and to command decoder 44. The command decoder in turn is connected to the ATM enhancement processor 38. The ATM enhancement processor 38 can therefor monitor and record the transactions. (Estes, col. 2, ll. 28-37 )

4. Estes discloses that monitoring of ATM enhancement processor 38 results in

...the daily activity and the type of transactions, but not the individual transactions, can be downloaded to the remote enhancement host 68. In this way, a remote operator of the automatic teller machine can keep track of the activity and thus the usefulness of a particular machine or its installation location. (Estes, col.3, ll. 14-19

5. Webster’s Colligate Dictionary Tenth Edition defines “usefulness” as capable of being put to use: *esp* serviceable for and end or purpose.

6. The Specification describes increasing ATM fees when demand is more inelastic than normal in that:

...the price of performing certain transactions on an ATM using an ATM may be increased for a time period spanning an hour before and an hour after a football

match occurring in a stadium close to the ATM.  
Similarly, it may be desirable to increase charging levels on a wet day since a customer having taken trouble to approach an ATM on such a day will probably have a greater need of the transaction than a customer who happens to be passing on a dry day.  
(Specification 8:6-10).

7. The Examiner took official notice "...that it is well know to one of ordinary skill in the art at the time of the invention that a public event will mean more people and more people will mean more potential ATM users." (Final p.3)

8. The Examiner found that "ATM send (*sic*) performance data to a server for every transaction including type and time of occurrence. (*see Estes, column 1, line 46 "monitor"& column 2, line 25-58, "monitor.. the transactions"*) (Answer, p.4).

9. Estes discloses that:

In order to control and update the information supplied the monitor and printer, as well as read the performance of the ATM enhancement processor 38, modem 64 is connected to the processor 38. The modem is connected through line 66 to a remote enhancement host 68. The modem enhancement host 68 can update the performance of the ATM enhancement processor 38 as well as read its performance. (Estes, col.3, ll. 5-11.)

## PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

#### ANALYSIS

We affirm the rejection of claims 31-41.

##### Claim 31

Appellant argues that the recording and monitoring functions of the ATM enhancement processor 38 does not equate to “predicting” because “‘predicting’ refers to a future event, namely, the ‘time when usage...will increase[.]’” whereas, “... ‘monitoring’ and ‘recording’ in the Estes-passage refer to a current event, or possibly a recent past event, namely, the ‘transaction.’” (Reply Br. 3.)

We disagree with Appellant. Estes in addition to disclosing recording transactional data, also discloses using this data to keep track of the activity at the machine (FF 4) to thus evaluate the usefulness of a particular machine. Further, according to Estes, the data is evaluated to determine if the machine is useful at a given location (FF 4). In determining if the involved machine has usefulness, by

definition, *the future serviceability* of the machine at a given location is considered (FF 5). Thus, contrary to Appellant's position, Estes discloses evaluating the recorded transaction to determine the future serviceability of a given machine.

With is in mind, we conclude that a person with ordinary skill in the art would know that in evaluating a machine's usefulness at a given location, such as disclosed by Estes, one would correlate time and use to arrive at a usefulness determination. In such a process, one would need to predict that the historic usage of the machine will continue similarly in the future. We thus conclude that it is not beyond the knowledge of a person with ordinary skill in the art to use the same historic data to predict peak usages of the machine as part of a usefulness determination. See *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (In making the obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ").

Appellant next argues that the Examiner wrongly asserts that Mishkin shows that an increase in charges captures the highest possible revenue. Appellant points out that Mishkin teaches precisely the opposite. (Appeal Br. 9.) Specifically, Appellant maintains that Figure 1 in Mishkin teaches increased pricing equals lower demand. (Appeal Br. 9.) We accept this. But, what Appellant's argument fails to discuss is that the Specification describes such periods where ATM fees increase is tied to when demand is more inelastic than normal, such as when someone is ready to enter a stadium event an hour before the start (FF 6) and needs cash to buy a ticket, or to buy items from a roving vendor



once inside. Such inelasticity in market conditions does not appear to be the case in Figure 1 of Mishkin where market equilibrium is allowed to occur.

We find however that the Examiner alternatively presented inelastic market demand situations as evidence of how pricing can be successfully increased for certain products, such as with phone calls and airline travel (FF 1). In such cases, as with most common carriers, there is a limited or fixed resource which allows such pricing practices to be successful. We thus agree with the Examiner, and conclude that a person with ordinary skill in the art would know that when a customer cannot use alternative markets as a source to purchase the same item, such as with an airline which has only a limited number of seats, pricing at the instant market can be increased, within reason, because the user has no where else to go. The application of common sense may control the combining of references.

Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.

*KSR*, 127 S. Ct. at 1742.

Appellant's response to the Examiner's airline fare example is that "[o]ne reason is that it seems clear that the highest charges for telephones/airlines occur during the weekdays, because that is the time when businesses utilize those services most. The telephone/airline companies reduce the charges on weekends, in order to attract customers when business is slack." (Appeal Br. 11-13.) We disagree with Appellant because as Appellant admits, the market bears the weekday price increases irrespective of those of the weekend because the

consumer, like those who an hour before a sports event, need the service to do business or to gain entrance into the arena.

Appellant next argues that because some banks do not charge ATM fees for their own customers, they do not seek to capture the highest possible revenue (FF 12). In light of the breadth of the claim, the Appellant's argument is not persuasive as to error in the rejection because claim 31 does not distinguish between customer and non-customer, it merely states increasing charges at the ATM during said time.

Appellant argues that pages 3 and 4 of the Final Office action "...in essence, reduces the invention to a "gist," and then rejects the invention thusly characterized. That is not allowed." (Appeal Br. 14.) We have read the Examiner's reasoning and conclude that, style aside, we find (FF 1,2) that the Examiner has provided some articulated reasoning with some rational underpinning for why a person with ordinary skill in the art would modify Estes to increase prices at predicted heightened usage times, enough to establish a prima facie case.

#### Claim 32

Claim 32 recites *wherein the time coincides with public events occurring near the ATM*. Appellant seeks citation of evidence because "[o]ne reason is that it is not clear what, exactly, is being Noticed,...."(Appeal Br. 16) First, Appellant's objection fails for either of two reasons. First, the Appellant has not specifically pointed out the supposed errors in the Examiner's taking of Official Notice, "includ[ing] stating why the noticed fact is not considered to be common

knowledge or well-known in the art. See 37 CFR § 1.111(b).” MPEP § 2144.03(C). An adequate traverse must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying Examiner's notice of what is well known to one of ordinary skill in the art. *In re Boon*, 439 F.2d 724, 728 (CCPA 1971). That has not been done here.

The Examiner found “...that it is well know to one of ordinary skill in the art at the time of the invention that a public event will mean more people and more people will mean more potential ATM users.” (FF 7) It is clear from the Examiner’s statement that the Notice is directed to people using the ATM in conjunction with public events.

In our view, the Examiner judicially applied assertions that certain facts are well known or common knowledge in the art by providing a technical line of reasoning underlying the determination of obviousness that is clear and unmistakable. MPEP § 2144.03(B) and (E). We therefore credit the Official Notice of the Examiner with respect to the above listed facts. Appellant has not provided any evidence to rebut these findings by the Examiner. Hence, we find no error in the Examiner’s use of Official Notice as cited above.

Second, and additionally, Appellant raises this objection in the first instance in their Appeal Brief when the case is under the jurisdiction of the Board. This does not constitute seasonably traverse a well-known statement during *examination*. See *In re Chevenard*, 139 F.2d 711 (CCPA 1943).

Appellant’s next challenge the Official Notice stating that even if accepted, the Official Notice fails because “[t]he mere presence of a public event near an

ATM does not imply that the ATM has raised charges at that time.” (Appeal Br. 16.) That argument is not well taken because the Appellant is attacking the Official Notice individually when the rejection is based on a combination of Estes, Official Notice and the Examiner’s finding of like increases with fares on air travel. *See In re Keller*, 642 F.2d 413, 426, (CCPA 1981); *In re Young*, 403 F.2d 754, 757-58 (CCPA 1968).

Claims 33 and 37

Claim 33 recites impertinent part, *wherein the ATM sends performance data to a server which data indicate, for each individual transaction executed by the ATM, the type of transaction and the time of occurrence of the transaction.*

Appellant argues that Estes fails to show performance data (Appeal Br. 17). We disagree with Appellant. As discussed above with respect to claim 31, Estes in addition to disclosing recording transactional data, discloses using this data to keep track of the activity at the machine (FF 4), and to thus evaluate the usefulness of a particular machine or its installation location. Such an evaluation in our view involves the use of performance data, e.g., the transaction records leading to a determination of usefulness of the machine.

Appellant next argues that because Estes discloses reporting “...the daily activity and the type of transactions, but not the individual transactions...” claim 33 distinguishes over it because it requires individual transactions (Appeal Br. 18). While Estes discloses excluding reporting of individual transactions, we do not see this as determinative under an obviousness standard because extraction of a

particular type of data from raw data is merely a selection process governed by system design. *See, In re Hopkins*, 342 F2d 1010, 1015 (CCPA 1965).

Claim 34

Claim 34 recites *wherein the ATM responds to commands received from the server and for altering the operation of the ATM*. Appellant argues that the modem line referred to by the Examiner in response to this claim feature does not show the subject matter of claim 34 (Appeal Br. 19). We disagree with Appellant. We find that Estes (FF 9) discloses that the modem allows a remote enhancement host or server to communicate with the ATM processor 38 in order to update the performance of the ATM enhancement processor 38 as well as read its performance.

Claim 35

Claim 35 states in pertinent part: *a) transmitting performance data from the ATM over a network to a server, which data is representative of the occurrence of operations carried out by the ATM; and b) analyzing the data to determine volume of transactions at particular times of the ATM*.

Appellant argues that Estes "... fails to show the "transmitting" and "analyzing" of the "transaction," as claimed." (Appeal Br. 20.) We disagree with Appellant. As discussed above with respect to claim 31, Estes in addition to disclosing recording transactional data, further discloses using this data to keep track of the activity at the machine, and to thus analyze the useful of a particular machine using transaction data.

Claim 36

Claim 36 recites *wherein the performance data is representative of customer usage of the terminal*. Appellant argues that Estes fails to teach performance data (Appeal Br. 21). We disagree with Appellant. As discussed above with respect to claims 33 and 34, we find that Estes discloses performance data (claim 33) which is transmitted via modem to a server (claim 34). In light of the breadth of the claim, the Appellant's argument is not persuasive as to error in the rejection.

Claim 38

Claim 38 recites *wherein said time is predicted by analyzing historical data representing usage of the ATM over a predetermined period of time*. As to claim 38 and claims 39-41 Appellant argues that Estes fails to disclose "historical data" (Appeal Br. 22). We disagree with Appellant. Estes specifically discloses downloading "daily activity" data (FF 4), which, even if such downloads occur at the end of each day, the data is historical in the sense that it reflects transactions occurring earlier in time. Appellant also argues Estes does not analyze, but for the reasons given above for claims 31, 33 and 35, Estes discloses an analysis of the daily transaction data to determine the usefulness of the machine at a given location (FF 4).

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### CONCLUSIONS OF LAW

We conclude the Appellant has not shown that the Examiner erred in rejecting claims 31-41 under 35 U.S.C. § 103(a).

### DECISION

The decision of the Examiner to reject claims 31-41 is AFFIRMED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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LV:

MICHAEL CHAN  
NCR CORPORATION  
1700 SOUTH PATTERSON BLVD  
DAYTON, OH 45479-0001